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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,623	11/16/2001	Eliezer Fisch		3484

7590 03/25/2005

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EXAMINER
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JASTRZAB, KRISANNE MARIE

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/786,623

Applicant(s)

FISCH ET AL.

Examiner

Krisanne Jastrzab

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 4-13, these claims are found to be vague and indefinite because they recite method limitations, which fail to further limit the apparatus claims from which they depend. Correction is required.

Further with respect to claim 8, "sufficiently representative" and "adequate substitute" are found to be vague and indefinite because it is unclear as to what would actually constitute "sufficiently representative" or "adequate substitute".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 50 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yasuko JPO 07055742 (Patent Abstracts of Japan).

The abstract of Yasuko clearly teaches sensing an odor in an array and creating a coded identity for that odor, followed by converting that code to reproduce the odor.

See the entire abstract.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ratton et al., a Sensors and Actuators article.

Ratton et al., clearly teach a sensory system for producing an identifiable signal for any sensed odor, that signal formed by an odor vector from matrix configuration.

See page 108, page 109 and the first column of page 110.

Claims 32-35, 37-38, 40-46 and 50 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pendergrass, Jr., U.S. patent No. 5,565,148.

Pendergrass, Jr. teaches a device for selectively providing a multiplicity of aromas, responsive to a signal. An array of aroma bearing elements is provided that supported on a carrier. A stepmotor is constructed to programmably rotate the carrier to position the aroma elements for release of the aroma. Fan means are provided to dispense the release aroma. The aroma bearing elements can also be provided in the form of rupturable capsules. See column 4, lines 50-68, column 5, lines 10-25, column 8, lines 9-16 and column 11, lines 37-49.

Claim 32-33, 35, 40-46 and 50 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lee et al., U.S. patent No. 5,724,256.

Lee et al., teach means for producing an odor upon receiving a signal indicative of that odor and desired concentration. The odor components are contained in an enclosure and a metering delivery device is included. The odor can be dispensed as liquid via piezo pump as in ink jet printers, or as solids provided on a matrix with heating elements provided to heat discrete section pertinent to the particular scent. The mechanism for delivery moves a porous member receiving the drops of the first type while a fan is activated to dispense the air, and the heating means are moved to the discrete, desired section to vaporize the scent in the second type. See column 2, lines 7-15, lines 25-45 and the figures.

Claims 32-35, 35, 38, 40, 41-43 and 50 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by McCarthy U.S. patent No. 4,603,030.

McCarthy teaches a scent-emitting system responsive to a signal indicative of the desired scent, a plurality of scent chips containing a palate of scents thereon, electronic drive means to move the desired chip into a release position and a fan for dispensing air over the chip to distribute the scent. See all of column 4, and particularly lines 17-21 and 40-45 and 65-68, and column 5, lines 3-7 and lines 30-35.

Claims 32-33, 35, 38, 42-46, and 50 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Frederickson et al., U.S. patent No. 6,390,453 B1.

Frederickson et al., teaches an odor generating system based on ink jet delivery of scent from a palate thereof. The system receives a signal for a given odor and

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concentration and responds thereto. Fan means are provided to move the jet delivered scent to the desired receipt location. Several odor components are provided. See column 2, lines 55-68, column 3, lines 50-60, column 7, lines 15-25, column 8, lines 10-23 and lines 37-42, column 9, lines 1-35, column 10, lines 1-15 and lines 56-65, and column 11, lines 20-30, column 13, lines 23-55 and column 14, lines 10-15.

Claims 32-35 and 38-43 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Rasouli et al., U.S. patent No. 6,004,516.

Rasouli et al., teach an odor generating system employing a laser to heat a matrix carrying a plurality of scent for release in response to a signal. See the abstract, column 4, lines 45-68, column 5, lines 1-7 and lines 29-45, column 6, lines 1-3 and lines 59-68.

***Claim Rejections - 35 USC § 103***

***Claim Rejections - 35 USC § 103***

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1; 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-17, 19-30, 22-28 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratton et al., as applied to claim 1 above, and further in view of Pendergrass, Jr.

Ratton et al., clearly teach a sensory system as instantly claimed and teach it's efficacy in a variety of detecting areas.

Pendergrass, Jr teaches an aroma generating device as instantly claimed, which is responsive to an outside signal and used in a variety of fields, including education, entertainment and medicine.

It would have been well within the purview of one of ordinary skill in the art to apply the sensory system of Ratton et al., for the driving signal of an aroma generating system, such as that taught in Pendergrass, Jr., because it would clearly optimize the accuracy of the odor signal received for odor generation.

Claims 2-15, 17, 22-28 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratton et al., as applied to claim 1 above, and further in view of Lee et al., U.S. patent No. 5,724,256.

Ratton et al., clearly teach a sensory system as instantly claimed and teach it's efficacy in a variety of detecting areas.

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Lee et al., teaches an aroma generating device as instantly claimed, which is responsive to an outside signal and used in a variety of fields, including education, entertainment and medicine.

It would have been well within the purview of one of ordinary skill in the art to apply the sensory system of Ratton et al., for the driving signal of an aroma generating system, such as that taught in Lee et al., because it would clearly optimize the accuracy of the odor signal received for odor generation.

Claims 2-15, 17, 20, 42-46 and 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratton et al., as applied to claim 1 above, and further in view of Frederickson et al.

Ratton et al., clearly teach a sensory system as instantly claimed and teach it's efficacy in a variety of detecting areas.

Frederickson et al., teaches an aroma generating device as instantly claimed, which is responsive to an outside signal and used in a variety of fields, including education, entertainment and medicine.

It would have been well within the purview of one of ordinary skill in the art to apply the sensory system of Ratton et al., for the driving signal of an aroma generating system, such as that taught in Frederickson et al., because it would clearly optimize the accuracy of the odor signal received for odor generation.

With respect to claims 54-55, Frederickson et al., clearly teach experimentation with the scents based on delivery to see their sensory receipt by the general human population. See column 13.



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Claims 3-17, 20-25, 29-31 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratton et al., as applied to claim 1 above, and further in view of Rasouli et al., and Budman U.S. patent No., 6,024,783.

Ratton et al., clearly teach a sensory system as instantly claimed and teach it's efficacy in a variety of detecting areas.

Rasouli et al., teach an aroma generating device as instantly claimed, which is responsive to an outside signal and used in a variety of fields, including education, entertainment and medicine.

Budman teaches the known and expected use of CD means to provide control in of a variety of stimuli including scent generation.

It would have been well within the purview of one of ordinary skill in the art to apply the sensory system of Ratton et al., for the driving signal of an aroma generating system, such as that taught in Rasouli et al, because it would clearly optimize the accuracy of the odor signal received for odor generation with the known and expected provision of scent control on a cd means as taught in Budman.

With respect to claims 29-31 and 47-49, it would have been obvious to one of ordinary skill in the art to combine both the memory and scent means into one cd means with reading lasers for each, because it is well recognized in the art to provide scent means via a cd as in Rasouli, and odor generating memory means in a readable cd as in Budman.


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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne Jastrzab whose telephone number is 571-272-1279. The examiner can normally be reached on Mon.-Wed. 6:30am-4:00pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Krisanne Jastrzab  
Primary Examiner  
Art Unit 1744

March 18, 2005